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was also not a significant difference in number of eggs retrieved, percent of mature eggs, or clinical/ongoing pregnancy rates.

CONCLUSIONS: The COVID-19 pandemic has had a negative impact on infertility patient populations. Specifically, COVID patients with infertility experienced significantly decreased mood and less support from family and friends compared to non-COVID patients. While there is no difference in overall quality of life, or fertility and early pregnancy outcomes, understanding the nuances of patients' experiences in the pandemic will allow for more insight into the way in which care is provided. Additionally, COVID-19 diagnosis and exposure does not appear to affect fertility treatment or early pregnancy outcomes. Therefore patients may be counseled that previous COVID-19 infection or concerns regarding possible exposure do not affect their fertility and early pregnancy outcomes.

IMPACT STATEMENT: This study shows the negative impact of perceived and confirmed COVID-19 exposure on stress levels related to infertility. These findings can guide how IVF patients are counseled and reassured during the pandemic.

SUPPORT: This study is grant-funded by the University Hospitals Research & Education Institute COVID Rapid Response Pilot Program

O-166 11:30 AM Tuesday, October 19, 2021

THE RELATIONSHIP BETWEEN PERCEIVED STRESS DURING THE COVID-19 PANDEMIC AND MENSTRUAL CYCLES AND SYMPTOMS.

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OBJECTIVE: The COVID-19 pandemic exacerbated existing and initiated new psychosocial, interpersonal, and environmental stressors. For menstruating people, these stressors may contribute to cycle irregularity and make family building an even more challenging journey. This study investigates the relationship between perceived stress and menstrual cycle and symptom changes during the COVID-19 pandemic.

MATERIALS AND METHODS: A survey was administered to users of Ovia Health's Fertility mobile application in the United States from March 2020 to April 2021. Items captured changes in menstruation pattern and symptomology and included the Perceived Stress Scale 4-item version (PSS-4).¹ A paired *t*-test was used to assess differences between groups. A *p*-value of < 0.05 was considered statistically significant.

RESULTS: Out of a total of 12,302 respondents, 36% reported experiencing some menstrual cycle and/or symptom changes. Most commonly reported changes included cycle starting early or late (87%), stronger symptoms during menstruation (e.g. low back pain, cramping, discharge changes) (29%), and heavier bleeding during periods (27%). Respondents reporting menstrual cycle or symptom changes tended to score slightly higher on average on the PSS-4 compared to those who did not report any changes (8.5 v. 8.3, respectively, *p* < 0.05). PSS-4 scores in this sample were notably higher in all respondents, regardless of cycle/symptom irregularity, compared to pre-pandemic benchmarking in similar populations.²⁻³

CONCLUSIONS: These results demonstrate that this sample's reported stress levels during the pandemic were noticeably higher than pre-pandemic benchmarks, and that these stress levels may contribute to changes in reproductive physiological processes such as menstruation. These changes may be especially frustrating and impactful for individuals trying to conceive and those struggling with infertility.

IMPACT STATEMENT: Reproductive medicine specialists should be aware of the relationship between stress fostered by the COVID-19 pandemic and menstrual pattern disruption, especially for patients trying to conceive with irregular menstrual patterns or those struggling with infertility. Providers should work together with their patients to formulate strategies to mitigate the impact of stress on menstrual cycle changes in order to optimize conception and fertility treatment outcomes.

References

1: Cohel et al (1983). A global measure of perceived stress. *J Health Soc Behav.* 24(4):385-96.

2: Cohen and Williamson (1988). Perceived stress in a probability sample of the US. *Soc Psych Health.* 31-67.

3: Warttig et al (2013). New, normative, English-sample data for the PSS-4. *J Health Psychol.* 18:1617-28.

SUPPORT: None.

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IMPACT OF EMPATHIC PHYSICIAN CONTACT ON PATIENT ANXIETY AND DISTRESS DURING THE WAITING PERIOD AFTER EMBRYO TRANSFER (ET): A RANDOMIZED CONTROLLED STUDY.



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OBJECTIVE: To investigate if an empathic physician phone call during the waiting period, between ET and first pregnancy test, decreases anxiety/distress amongst in vitro fertilization (IVF) patients.

MATERIALS AND METHODS: We included female patients aged 18-43 undergoing their first ET with autologous fresh or euploid cryopreserved-thawed embryos following preimplantation genetic testing–aneuploidy (PGT-A). Prior to the first monitoring appointment, patients completed an online survey comprising demographics, State-Trait Anxiety Inventory (STAI), and Hospital Anxiety and Depression Scale (HADS). After ET, patients were randomized (stratified for fresh and PGT-A) to either a 5-minute scripted phone call (CALL) from a single physician 3-4 days after the ET or routine care (RC). The physician received empathy training prior to the study. Patients completed a follow-up survey 8-9 days after ET but prior to pregnancy test. We calculated mean paired differences between the groups using two-tailed *t*-tests.

RESULTS: We enrolled 373 patients and randomized 231 (164 fresh, 67 PGT-A). Baseline patient and IVF characteristics were similar, including reported history of anxiety or depression. Phone call duration was 5.6 ± 0.6 minutes. Baseline scores were similar for both STAI-State (CALL: 40.4 ± 10.1, RC: 39.4 ± 10.4; *P*=.43) and HADS (CALL: 10.3 ± 5.5, RC: 10.3 ± 5.8; *P*=.95). There were lower mean increases in the CALL group compared to the RC group for both the STAI-State (3.3 ± 10.5 vs. 7.8 ± 11.8, respectively; *P*=.002) and the HADS (0.3 ± 4.6 vs. 2.4 ± 5.7, respectively; *P*=.002). The majority of patients in the CALL group found the call helpful and reported that it decreased anxiety/distress (Table 1). Most (83.5%) patients in the RC group stated that a physician call would be helpful during the waiting period, with 86.1% reporting the call would decrease their anxiety/distress.

CONCLUSIONS: A physician phone call during the waiting period mitigates patient anxiety/distress. Most patients in the RC group noted that a physician call would be welcome to decrease anxiety/distress.

IMPACT STATEMENT: Empathic physician contact during the waiting period after ET is beneficial for providing patient reassurance and support and for decreasing stress.

TABLE 1. Characteristics of the physician call for the CALL group

Characteristic	CALL group n=116
How helpful was the call?*	
Very helpful	64 (55.2)
Somewhat helpful	42 (36.2)
Neither helpful nor unhelpful	10 (8.6)
How did the call affect your levels of distress and anxiety?†	
Decreased very much	31 (26.7)
Decreased a little bit	63 (54.3)
Did not affect	20 (17.2)
Increased a little bit	2 (1.7)

Data are shown as n (%)

*No respondents selected "somewhat unhelpful" or "very unhelpful"

†No respondents selected "increased very much"